

GSC36M Series

MHz Quartz Crystal Unit

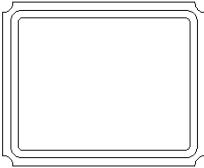
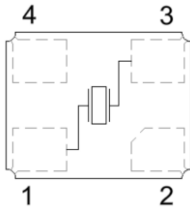
Description

The Series is MHz Crystal Unit with 2016 Package.

Mechanical Data

- 2016 Package
- Seam Sealing
- RoHS Compliant and Halogen Free

Packages & Pin Assignments

2016		Equivalent Circuit	
			
Pin	Description	Pin	Description
1 & 3	Connect Quartz Element	2 & 4	NC (Not Connected)

Ordering and Marking Information

Ordering Information						
Part Number	F	F _{tol}	C _L	ESR	Marking	Reel
	MHz	ppm	pF	Ω		PCS
GSC36M4808F-1150	48.000	±8	11.1	50	EC□□□ 48000	3,000
GSC36M3810F-1080	38.400	±10	10	80	EC□□□ 38400	3,000

■ Marking □□□ for GS Code

● **GSC36M4808F-1150**

Electrical Characteristics (T_A=25°C unless otherwise specified)

Symbol	Description	Min	Typ	Max	Unit	Note
F	Nominal Frequency		48.000		MHz	
F_{tol}	Frequency Tolerance		±8		ppm	@ 25±3°C
	Temperature Drift		±14		ppm	-30°C~+85°C
	Aging		±2		ppm	First Year
C_L	Load Capacitance		11.1		pF	
ESR	Equivalent Series Resistance			50	Ω	
D_L	Drive Level	0.01	100	200	μW	
C₀	Shunt Capacitance			2	pF	
R_{INS}	Insulation Resistance	500			MΩ	@ DC100V
T_{OPR}	Operation Temperature	-30		85	°C	
T_{STG}	Storage Temperature	-55		125	°C	
	Crystal Cut Type	AT CUT				
	Oscillation Mode	Fundamental				

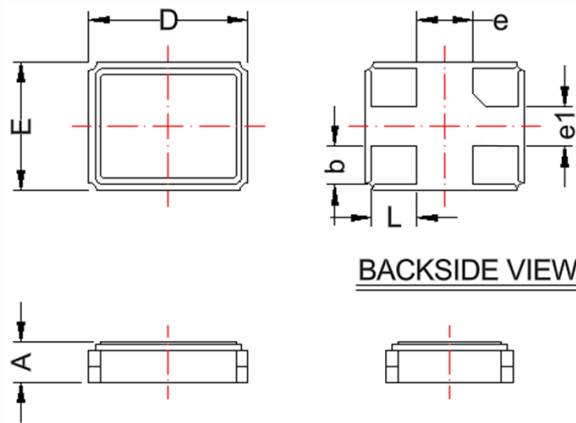
● **GSC36M3810F-1080**

Electrical Characteristics (T_A=25°C unless otherwise specified)

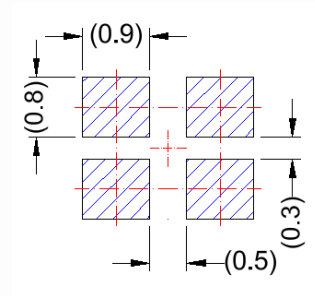
Symbol	Description	Min	Typ	Max	Unit	Note
F	Nominal Frequency		38.400		MHz	
F_{tol}	Frequency Tolerance		±10		ppm	@ 25±3°C
	Temperature Drift		±10		ppm	-20°C~+70°C
	Aging		±2		ppm	First Year
C_L	Load Capacitance		10		pF	
ESR	Equivalent Series Resistance			80	Ω	
D_L	Drive Level	0.01	100	200	μW	
C₀	Shunt Capacitance			2	pF	
R_{INS}	Insulation Resistance	500			MΩ	@ DC100V
T_{OPR}	Operation Temperature	-20		70	°C	
T_{STG}	Storage Temperature	-55		125	°C	
	Crystal Cut Type	AT CUT				
	Oscillation Mode	Fundamental				

2016

Package Dimension



Recommended Land Pattern



Unit:mm

Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	0.40	0.60	0.016	0.024
b	0.30	---	0.012	---
D	1.90	2.10	0.075	0.083
E	1.50	1.70	0.059	0.067
e	0.70 TYP		0.028 TYP	
e1	0.50 TYP		0.020 TYP	
L	0.40	---	0.016	---





NOTE:



Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

NOTICE

- Globaltech Semiconductor assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all Globaltech Semiconductor products described or contained herein. Globaltech Semiconductor products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Globaltech Semiconductor makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- Information furnished is believed to be accurate and reliable. However Globaltech Semiconductor assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties, which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Globaltech Semiconductor. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information without express written approval of Globaltech Semiconductor.

CONTACT US

GS Headquarter	
	4F, NO.43-1, Lane 11, Sec. 6, Minquan E. Rd Neihu District, Taipei City 114761, Taiwan (R.O.C).
	886-2-2657-9980
	886-2-2657-3630
	sales_twn@gs-power.com

RD Division	
	824 Bolton Drive Milpitas. CA. 95035
	1-408-457-0587